

REMARKS***Claim Rejections §112***

Claim 25 was rejected by the Examiner as being indefinite because insufficient basis was provided for the limitations "said front spring" and "said rear spring". Applicant has amended claim 25 by replacing the word "front" with "first" and the word "rear" with "second". Applicant asserts that sufficient antecedent basis is provided for the limitations of the claims and requests that the Examiner's rejection be withdrawn.

Claim Rejections §102

Claims 1, 5-7 and 10-12 were rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 3,003,781 to Black.

Claim 1 as amended recites:

... a body attached to the vehicle and supporting said front shaft and said rear shaft, said front shaft and rear shaft being rotatable relative to said body, wherein said body maintains a pre-determined distance between the vehicle and said front and rear shaft ...

Black discloses an air spring vehicle suspension system which is incorporated in a self-contained sub-frame 6. The system of Black includes air spring 27 associated with each of the left and right sides of the vehicle. As shown in Figures 2 and 3, the air spring is positioned between front and rear axles 5. Diagonal struts 47 extend downwardly and outwardly from either side of each air spring 27. The upper end of each diagonal strut 47 is welded to a housing 50 at either side of the air spring 27. The system includes four shackle collars 46. Two of the shackle collars 46 are provided under opposite ends of the rear axle and two of the shackle collars 46 are provided under opposite ends of the front axle 5. The lower end of each diagonal

strut 47 is welded to a stud 38 extending from a shackle collar 46. The system also includes horizontal limbs 26, each of which includes a main horizontal bar 43 and a brace 44. Outer ends of the main horizontal bars 43 and the braces 44 are welded to the shackle collar 46. Inner ends of the main horizontal bars 43 and the braces 44 are mounted to bearing collars 37 positioned underneath the air spring 37. As shown in Figures 11 and 12, as the axles are moved up and down the entire system, including the shackle collars 46, moves up and down relative to the frame of the vehicle. Forces are applied to the front and rear axles 5 are transmitted to the air springs 27 through the diagonal struts 47.

As noted above, claim 1 as amended includes the limitation that the front and rear shafts are attached to a body which is mounted to the vehicle. As further provided by claim 1, the body maintains a predetermined distance between the front and rear shafts and the vehicle. In the Office Action, the Examiner found that the shackle collars 46 of Black are equivalent to the front and rear shafts of Applicant's invention. As shown in Figures 11 and 12 of Black and as noted above, the shackle collars 26 move up and down relative to the vehicle. Thus, the limitation of claim 1 which provides that the front and rear shafts are maintained at a pre-determined distance is not provided by the invention of Black.

Unlike Black, Applicant's invention provides for a body which maintains a predetermined distance between the vehicle and the front and rear shafts. This arrangement provides for a simple and compact design. The system of Black requires placement of several components forwardly and rearwardly of the air spring 27 and additional components forwardly and rearwardly of the front and rear axles. In contrast, Applicant's invention includes a minimum number of components and is centralized under the air spring with only the leaf springs

extending under the front and rear axles. This simple, compact design provides cost benefits with respect to manufacturing and with respect to maintenance.

Because Black does not disclose a system including "... a body attached to the vehicle and supporting said front shaft and said rear shaft, said front shaft and rear shaft being rotatable relative to said body, wherein said body maintains a pre-determined distance between the vehicle and said front and rear shaft ...", claim 1 as amended is not anticipated nor rendered obvious by Black. Thus, Applicant respectfully requests reconsideration and allowance of claim 1.

Claims 5-7 and 10-12 depend from claim 1. Applicant asserts that because claim 1 is allowable, claims 5-7 and claims 10-12 are also allowable. Applicant respectfully requests reconsideration and allowance of claims 5-7 and 10-12.

Claim 9 was rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 2,170,454 to Larrison. Claim 9 has been amended such that claim 9 now depends from claim 1. Applicant asserts that because claim 1 is allowable, claim 9 is also allowable. Applicant respectfully requests reconsideration and allowance of claim 9.

Claim 25 was rejected by the Examiner under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 4,504,079 to Strong.

Claim 25 provides:

An isolator to be used in a suspension system for a vehicle having a first axle supported by a first spring and a second axle supported by a second spring, the isolator comprising:

a resilient member;

a first shaft operatively connected to said front spring and said resilient member, wherein said first shaft rotates in response to forces applied to or removed from said first spring;

a second shaft operatively connected to said rear spring and said resilient member, wherein said second shaft rotates in

response to forces applied to or removed from said second spring;
and

wherein rotation of said first and second shaft transfers
said forces to said resilient member and causes said resilient
member to expand or contract.

Strong discloses a system of interconnected air bags suspended from a frame of a vehicle. As shown in Figure 8, the system includes spaced "upper" air bags 50. As described at column 9, lines 54-56 "The lower portion of each 'upper' bag is engaged by a **piston piece 54 which forms part of an elongated piston member 56**". Each piston member is coupled to its respective axle by a connecting member 58 and pivotally mounted to the vehicle frame by a pivotal connection 60.

In the Office Action, the Examiner found that the unnumbered shaft joining member 56 to 54 is equivalent to the front and rear shafts of Applicant's claimed invention. As noted above, the description of Strong provides that the piston piece 54 forms part of the elongated piston member 56. Applicant finds no disclosure that a shaft is provided between the members 54 and 56. Moreover, Applicant finds no disclosure that the "shaft" identified by the Examiner rotates as required by claim 25.

Because claim 25 is not anticipated nor rendered obvious by Strong, Applicant respectfully requests reconsideration and allowance of claim 25.

Allowable Claims

Applicant thanks the Examiner for the indication of allowance with respect to claims 14-24.

Newly Added Claim

Claim 26 depends from claim 1 and further specifics that the predetermined distance between the vehicle and the front and rear shafts is adjustable. Applicant asserts that because claim 26 depends from claim 1, claim 26 is allowable. Applicant respectfully requests consideration and allowance of claim 26.

In view of the above amendments and remarks, Applicant respectfully submits that the claims of the application are allowable over the rejections of the Examiner. Should the Examiner have any questions regarding this Amendment, the Examiner is invited to contact one of the undersigned attorneys at (312) 704-1890.

Respectfully submitted,

Dated: March 21, 2006

By: 

Richard A. Giangiori, Reg. No. 24,284
Linda L. Palomar, Reg. No. 37,903
Paige A. Kitzinger, Reg. No. 45,219
TREXLER, BUSHNELL, GIANGIORGI
BLACKSTONE & MARR, LTD.
105 W. Adams Street, Suite 3600
Chicago, Illinois 60603
(312) 704-1890

943569.WPD